



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,571	03/14/2005	Lynn Stam	70131USPCT	9999

22847 7590 10/27/2006

SYNGENTA BIOTECHNOLOGY, INC.
PATENT DEPARTMENT
3054 CORNWALLIS ROAD
P.O. BOX 12257
RESEARCH TRIANGLE PARK, NC 27709-2257

EXAMINER

NOAKES, SUZANNE MARIE

ART UNIT PAPER NUMBER

1656

DATE MAILED: 10/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/527,571

Applicant(s)

STAM ET AL.

Examiner

Suzanne M. Noakes, Ph.D.

Art Unit

1656

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-7 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

Art Unit: 1656

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Groups 1-184, claim 1a(i), b and c, drawn to a method for identifying a compound that inhibits the activity of a protein essential for *Drosophila* viability by expressing a polynucleotide sequence selected from the even numbered SEQ ID Nos: 14-380 and testing compounds suspected of having the ability to inhibit the activity of the expressed protein. **Each group is respectively represented by ONE amino acid sequence represented by the even DNA molecules of SEQ ID Nos: 14-380 (e.g. SEQ ID No: 14 = Group 1; SEQ ID No: 16 = Group 2, etc.). N.B. This is NOT an election of species.**

Groups 185-369, claim 1a(ii), b and c, drawn to a method for identifying a compound that inhibits the activity of a protein essential for *Drosophila* viability by expressing a polynucleotide sequence encoding a protein selected from the odd numbered SEQ ID Nos: 15-381 and testing compounds suspected of having the ability to inhibit the activity of the expressed protein. **Each group is respectively represented by ONE amino acid sequence represented by the odd protein sequences of SEQ ID Nos: 15-381 (e.g. SEQ ID No: 15 = Group 185; SEQ ID No: 17 = Group 186, etc.). N.B. This is NOT an election of species.**

Groups 370-554, claim 2, drawn to a method of killing or inhibiting the growth or viability of an insect by administering a compound that inhibits a DNA molecule selected from the even numbers of SEQ ID Nos: 14-380. **Each group is respectively represented by ONE amino acid sequence represented by the even DNA molecules of SEQ ID Nos: 14-380 (e.g. SEQ ID No: 14 = Group 370; SEQ ID No: 16 = Group 371, etc.). N.B. This is NOT an election of species.**

Groups 555-738, claim 2, drawn to a method of killing or inhibiting the growth or viability of an insect by administering a compound that inhibits a protein selected from the odd numbers of SEQ ID Nos: 15-381. **Each group is respectively represented by ONE amino acid sequence represented by the odd protein sequences SEQ ID Nos: 15-**

Art Unit: 1656

381 (e.g. SEQ ID No: 15 = Group 555; SEQ ID No: 17 = Group 556, etc.). N.B. This is NOT an election of species.

Groups 739-923, claim 3a(i), b and c, drawn to a method for identifying a compound that interacts the activity of a protein essential for *Drosophila* viability by expressing a polynucleotide sequence selected from the even numbered SEQ ID Nos: 14-380 and testing compounds suspected of having the ability to inhibit the activity of the expressed protein. **Each group is respectively represented by ONE amino acid sequence represented by the even DNA molecules of SEQ ID Nos: 14-380 (e.g. SEQ ID No: 14 = Group 739; SEQ ID No: 16 = Group 740, etc.). N.B. This is NOT an election of species.**

Groups 924-1108, claim 3a(ii), b and c, drawn to a method for identifying a compound that interacts the activity of a protein essential for *Drosophila* viability by expressing a polynucleotide sequence encoding a protein selected from the odd numbered SEQ ID Nos: 15-381 and testing compounds suspected of having the ability to inhibit the activity of the expressed protein. **Each group is respectively represented by ONE amino acid sequence represented by the odd protein sequences of SEQ ID Nos: 15-381 (e.g. SEQ ID No: 15 = Group 924; SEQ ID No: 17 = Group 925, etc.). N.B. This is NOT an election of species.**

Groups 1109-1292, claim 4, drawn to a method of killing or inhibiting the growth or viability of an insect by administering a compound that interacts with a DNA molecule selected from the even numbers of SEQ ID Nos: 14-380. **Each group is respectively represented by ONE polynucleotide sequence represented by the even DNA molecules of SEQ ID Nos: 14-380 (e.g. SEQ ID No: 14 = Group 1109; SEQ ID No: 16 = Group 1110, etc.). N.B. This is NOT an election of species.**

Groups 1293-1477, claim 4, drawn to a method of killing or inhibiting the growth or viability of an insect by administering a compound that interacts with a protein selected from the odd numbers of SEQ ID Nos: 15-381. **Each group is respectively represented by ONE amino acid sequence represented by the even DNA molecules of SEQ ID Nos: 15-381 (e.g. SEQ ID No: 15 = Group 1293; SEQ ID No: 17 = Group 1294, etc.). N.B. This is NOT an election of species.**

Groups 1478-1662, claims 5-7, drawn to a method of killing or inhibiting the growth or viability comprising inhibiting in an insect the expression of a protein that is at least 60% identical to a protein selected from the odd amino acid sequence of SEQ ID Nos: 15-381 or whereby the inhibition of expression occurs by disrupting the polynucleotide sequence that is at least 60% identical to that of SEQ ID Nos: 14-380. **Each group is respectively represented by ONE amino acid sequence represented by the odd protein sequences of SEQ ID Nos: 15-381 and its corresponding DNA sequence (e.g. SEQ ID No: 14 (DNA that encodes SEQ ID No: 15) = Group 1478; SEQ ID No:**

Art Unit: 1656

16 (DNA that encodes SEQ ID No: 17) = Group 1479, etc.). N.B. This is NOT an election of species.

2. The inventions listed as Groups 1-1662 do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: SEQ ID No: 15 is 100% identical to SEQ ID No: 21447 of the international patent WO 2001 71042 A2. Therefore, the technical feature linking the inventions of Groups 1-1662 does not constitute a special technical feature as defined by PCT Rule 13.2, *as it does not differentiate the claimed subject matter as a whole over the prior art*. Since according to PCT Rule 13.2 the presence of such a common or corresponding special technical feature is an absolute prerequisite for unity to be established, and given that there does not appear to be any other technical feature common to the claimed subject matter as a whole which might be able to fulfill this role, the currently claimed subject matter lacks unity of invention according to PCT Rule 13.1.

3. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Art Unit: 1656

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suzanne M. Noakes, Ph.D. whose telephone number is 571-272-2924. The examiner can normally be reached on Monday to Friday, 7.00am to 3.30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleen Kerr can be reached on 571-272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



SMN

17 October 2006



KAREN COCHRANE CARLSON, PH.D.
PRIMARY EXAMINER